



National Science Foundation

Division of Human Resource Development

ADVANCE Program Response to 2011 Committee of Visitors (COV) Report October 31, 2011

Summary

The ADVANCE program Committee of Visitors meeting was held on June 15-17, 2011, at the National Science Foundation in Arlington, Virginia. Subsequent to the meeting, the COV provided a report to the NSF, which was reviewed for accuracy and relevance. The final report was submitted in September of 2011. Below is a list of recommendations and suggestions as indicated in the final COV report.

The ADVANCE program is extremely grateful for the insightful recommendations and suggestions of the 2011 COV. Specific responses to their recommendations and suggestions are indicated below. It is noted that a response of “Not Consistently” was indicated in Section I.6, *Documentation to the PI Providing the Rationale for the Award/Decline Decision*. While no specific recommendation or suggestion was made regarding this particular section, the matter is addressed, in detail, within the response to Section I.7.a, *Quality and Effectiveness of the Program’s Use of Merit Review Process*.

SECTION I. QUALITY AND EFFECTIVENESS OF MERIT REVIEW PROCESS

I.7.a COV Suggestion

The COV suggests that reviews could be more informative if a reviewer template were provided to guide the reviewer in commenting specifically on areas critical to the review process such as sustainability plans, data analyses, social theory and budget. In addition, providing a sample of an informative and a non-informative review in the reviewer training will help to improve the quality of the review.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV suggestion to provide a reviewer template as a means of promoting more informative and consistent reviews.

Inconsistency in the quality of individual panel reviews was also noted in Section I.6 of the COV Report. Attaining consistency in panel reviews is a challenge of the review process. In an attempt to prevent wide variations in quality, the ADVANCE program currently provides a pre-panel webinar and an orientation on the first day of the panel meeting to highlight specific elements of interest to the program, as well as the importance of thorough reviews. However, some inconsistencies still persist. In response to the COV suggestion, a newly-developed reviewer template will be utilized in future panel meetings and will include critical areas of interest related to the ADVANCE mission. Additionally, sample reviews will be incorporated into the pre-panel webinar to further promote consistent and complete reviews.

I.7.b COV Recommendation

The COV recommends including, in the jacket, any supplementary material requested by the PO and identified in the review analysis; this action will make the selection process more transparent.

ADVANCE Program Response

The ADVANCE program is in full agreement with the recommendation of the COV to add supplementary material requested by the Program Officer to the electronic jacket.

It is the practice of the ADVANCE program to request supplemental information and clarifications from potential PIs who are targeted for funding. These requests seek clarification or modification of any area of concern identified by either the review panel or ADVANCE program staff. Uploading all correspondence that both supports the review analysis and is related to requests for supplemental information will increase transparency of the selection process. To that end, the ADVANCE program will immediately adopt this practice.

I.7.c COV Recommendation

The COV recommends that the “Panel Recommendation Key” be used consistently or removed from the Panel Summary template.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV recommendation to consistently use or remove the *Panel Recommendation Key*.

The panel summary, which is viewed by the PI has several field headings that are populated by the review panel and Program Officers, including *Panel Recommendation Key*. These headings are a fixed component of the panel summary template. However, the content associated with each heading is under the control of the ADVANCE program.

At the suggestion of the COV, the program will omit the *Panel Recommendation Key* as well as the *Panel Recommendation* fields from the panel summary template. Additionally, the program offices will exercise due diligence in promoting panel summaries that are robust in capturing the sentiment of the entire panel of reviewers, particularly when there is a lack of consensus. It is expected that, collectively, these approaches will improve consistency and PI satisfaction.

SECTION II. SELECTION OF REVIEWERS

II.1 COV Suggestion:

This issue [lack of engineers and/or scientists represented on panels] should be addressed by conscious effort. There is also continuing concern about an insufficient number of male science faculty members and administrators on the panels, even though the numbers have improved since the 2008 COV.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV suggestion to increase the number of male science faculty and administrators on ADVANCE review panels.

Diversity on review panels is a key consideration in panel selection for the ADVANCE program. Regularly, diversity in race, gender, geographic region, academic discipline, institution type, and academic rank/administrator role is sought, while prioritizing panelists who are motivated and knowledgeable about gender equity in the academic STEM disciplines. Further, the ADVANCE program offices tailor individual review panels to meet the specific content of the proposals under review.

In its efforts to achieve greater gender and administrator diversity on its panels, the ADVANCE program will exercise diligence in over-soliciting both male and administrator panelists who provide critical insights uniquely informing efforts for institutional transformation. These efforts will be tempered with attention to the native discipline expertise of the panelists, other types of diversity, and the types of proposals being reviewed.

SECTION III. MANAGEMENT OF THE PROGRAM UNDER REVIEW

III.4 COV Suggestion

In two instances the Program Response was appropriate (substantive comments in reviews—Part A.1.4, pp. 1, Updated Program Response; geographical distribution or proposals and awards—Part A.3.8, pp 4, Updated Program Response) but has not produced the desired results. Alternate strategies need to be developed and implemented.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV suggestion to develop and implement alternate strategies to broaden its portfolio to include a wide geographic distribution.

The COV acknowledged the efforts of the ADVANCE program to address inadequate geographic distribution of proposals and awards. They note, however, that current efforts are not producing desired results. To address the issue of geographic diversity the ADVANCE program will continue to exercise due diligence in providing targeted outreach to institutions in states that have received no ADVANCE funding, as well as encouraging previously funded institutions to consider the Institutional Transformation award, which, currently, has the least geographical diversity among all of the ADVANCE funding mechanisms.

Additionally, as has been the practice over the past three years, the ADVANCE program will continue to use PI meetings as vehicles for outreach to potential PIs within targeted communities. Such communities have included professional societies, women's colleges, and minority serving institutions. Specific activities at PI meetings have included relevant keynote addresses and workshop sessions aimed at attracting a wider audience to the ADVANCE community. Outreach to geographically remote/geographically underrepresented institutions in a future ADVANCE PI meeting continues a successful tradition of outreach and also raises the profile of the ADVANCE program within the broader STEM community.

SECTION V. OTHER TOPICS

V.1 COV Recommendation

To the extent possible ADVANCE should promote state-of-the-art program evaluation in these areas, which are challenging to measure. The COV recommends convening a broad-based discussion that would perhaps result in targeted solicitation to address these important issues. Such sophisticated evaluation schemes would ideally lead to best practices.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV recommendation to promote assessment of ADVANCE program outcomes.

To that end, in 2008, two contracts were awarded to Westat and Urban Institute for evaluation of the ADVANCE program, primarily the first two cohorts. It was agreed that the first two cohorts would yield the most robust data given that these institutions had completed their funding periods. The Westat contract is designed to provide a quantitative study of the ADVANCE program to evaluate the effectiveness of two components in particular, Institutional Transformation awards and Fellows awards. The Urban Institute contract is designed to provide a qualitative assessment of the ADVANCE program using a case study approach. The emphasis of the qualitative evaluation is to examine institutionalization and dissemination of ADVANCE best practices. Currently, both evaluations are ongoing.

V.2 COV Recommendation

The COV recommends that the program increase its outreach to U.S.-based disciplinary professional meetings where discipline-specific accomplishments specific to those areas can be highlighted. The COV suggests that the emphasis should be placed on national outreach efforts for more effective use of limited resources and maximum impact.

ADVANCE Program Response

The ADVANCE program is in agreement with the recommendation of the COV to expand its outreach to U.S.-based disciplinary professional meetings.

It is noted that over the course of the review period (FY08-10), seven and five presentations were delivered at national and international disciplinary professional meetings, respectively. The ADVANCE program fully intends, as budget realities allow, to continue this practice and expand such activity to nationally-based disciplinary societies who have not previously been engaged with ADVANCE.

Also, in response to the previous COV, the ADVANCE PI meetings have been used as opportunities for expanding its outreach efforts. In 2009, the ADVANCE PI meeting hosted representatives from professional societies to share in gender equity discourse and gain information regarding ADVANCE funding opportunities.

The ADVANCE program, as budget realities allow, seeks to also maintain its international visibility and prominence as a world leader in promoting gender equity in the STEM disciplines.

This is particularly important as the need for a globalized STEM workforce increases, and is consistent with the current solicitation which encourages internationalization of ADVANCE best practices.

V.3 COV Suggestion

The Foundation needs to broaden the conceptualization and awareness of the need for evaluation to ensure the inclusion of robust strategies to assess program goals and impacts. This is particularly relevant to ADVANCE because of the need to provide credible information to the broad array of directorates involved in supporting the program and the nature of institutional transformation.

ADVANCE Program Response

The ADVANCE program is in full agreement with the COV suggestion for NSF to broaden the conceptualization and awareness of the need for program evaluation.

Within the Directorate, a number of activities are underway to support more rigorous evaluation of its programs and expand the knowledge base about evaluation, generally. These activities include a Directorate-wide working group focused on ways to improve the quality of both program and project evaluation; capacity building across the Directorate and Agency through forums, working groups, and the like; an increased emphasis on the use of evaluators in review panels; and a program, *Promoting Research in Innovation Methodology in Evaluation*, housed in the Directorate's Division of Research on Learning. It is envisaged that the current evaluations will provide credible evidence that illustrates a positive impact of ADVANCE on higher education.

V.4 COV Suggestion

The COV recognizes that the evaluation of the ADVANCE program by the Urban Institute and Westat is currently underway consistent with the 2008 COV recommendation; however, despite being a central aspect of the evaluation, the case studies are yet to be released. The COV reiterates the importance of this type of qualitative data to understanding program impact.

ADVANCE Program Response

The ADVANCE program is in full agreement and shares the COV's view on the importance of qualitative, as well as quantitative, data in evaluating the impact of the ADVANCE program on gender equity in the academic STEM disciplines. It is noted that the preliminary findings of both evaluation contracts are scheduled to be unveiled at the upcoming ADVANCE PI meeting in November of 2011. It is anticipated that the full reports will be available for broad distribution and dissemination in the not too distant future.

V.5.b COV Suggestion

Additionally, the COV notes that the following items would be particularly helpful in providing clarity and guidance as future COV members are selected and convened: 1) The annotated template would be useful in advance of the COV; while it is helpful to receive the questions and

materials in advance, the annotated template would help focus the COV members as they begin to examine the information provided. 2) Materials sent should be prioritized, with materials requiring advance substantive review ranked first; the inclusion of the annotated template with these materials would again help focus a COV member, but the importance of all materials should be ranked.

ADVANCE Program Response

The ADVANCE program notes the concerns of the COV raised above. To that end, due diligence will be exercised in providing COV members with clear instructions and guidance for accessing COV materials prior to the COV meeting. Additionally, the Program Officers will provide all materials in order of priority and with clear indication of those review materials that are essential for careful review prior to the COV meeting.